

Skill Development

Emerging Trends in India

A Public Economics Perspective

Dr. K.P Krishnan
(Views personal)

Structure of Presentation

- Public Economics view of Skill Development
- Role of Public Policy/State in Skill Development
- Evolution of Indian Skill Development Ecosystem
- Current GOI Programs in Skill Development
- Way Forward
- Q&A

Is there a Market for Skills Acquisition (in India) ?

Demand side

- India: estimated incremental skilled manpower requirement in 24 high growth sectors, until 2022 : 103 million
- Globally: net workforce shortfall is 32 – 39 million by 2020 (due to low birth rate and ageing population)

Significant demand for skilled workers in India and globally

Supply side

- 24 million youth enter the 15+ age group every year
- 47% of children drop out at secondary school level
- Hence ~10-12 million youth enter the workforce every year
- Annual training capacity : 2.5 million

**Large young population;
Limited training capacity**

Public Economics & Skill Development- I

Basic Education not characterized by non-rivalry or excludability – Hence not a “Public Good”

Basic Education is however marked by large positive externalities – Hence a “Merit Good”

Large divergence between social and private costs/benefits– Market failure likely in the form of under-provision

Argument for “State Provision”– “State Provision” not necessarily “State Production”

Skill Development similar to Basic Education + practical/hands on training– Stronger case for state funding but private production

Public Economics & Skill Development- II

**State funding with private production calls for different role of “State”–
Ensuring value for public expenditure**

Ensuring quality of training though–

- Contracting or
- Regulation

**Two more factors of Skill
Development–**

- Target population likely to be vulnerable
- Potential for collusive behavior

Indian Model was a hybrid-

- NCVT without regulatory powers
- Poor contracting & enforcement capacity of Governments

Sub-optimal outcomes

Indian VET & Skill Development Landscape- I

- Formal Indian VET : **ITI system (1950s)**
- HR obverse of II five year plan industrialization & engineering PSUs
- Now **15,042** NCVT affiliated ITIs in India
- **81%** private & **19%** government
- Average government ITI
 - Large tracts of land
 - Good building
 - Poor quality labs/equipment
 - 50% + teacher vacancies, balance formally qualified, well paid, low motivation
- Average private ITI not likely to be better

Indian VET & Skill Development Landscape- II

2007-17 GOI MES implemented through State Government

- About Rs. 1250 Crore spent on the scheme
- About 14,000 private sector skill development providers
- 450+ private sector assessment & certification agencies
- ~43 Lakh youth trained, assessed & certified

2007 NSDC launched

- 11,685 SMART accredited Training Centers
- Sector Skill Councils handle assessment & certification
- More than 70 Lakhs trained assessed and certified (PMKVY 2.0 & 1.0 and STAR)
- 52% Placement outcome in the placement linked skill component – PMKVY 2.0

Skill Development Programs of GOI: “Skill India Mission”

(A) Increase scale

- Numbers
- Domain
- Location

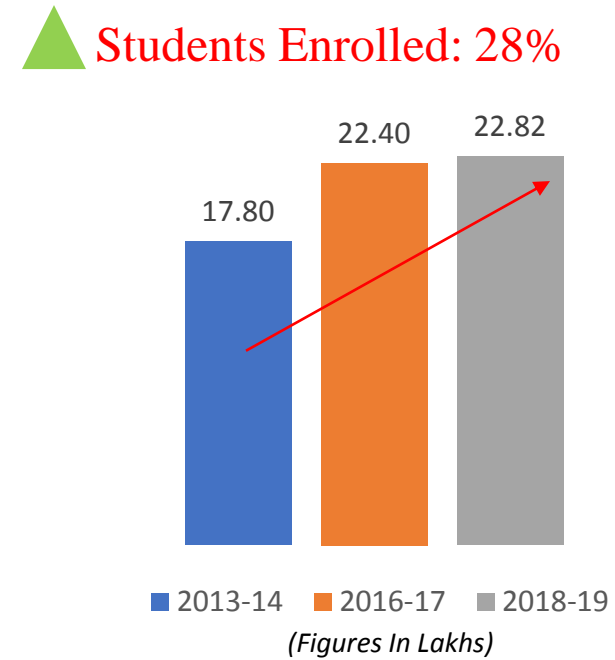
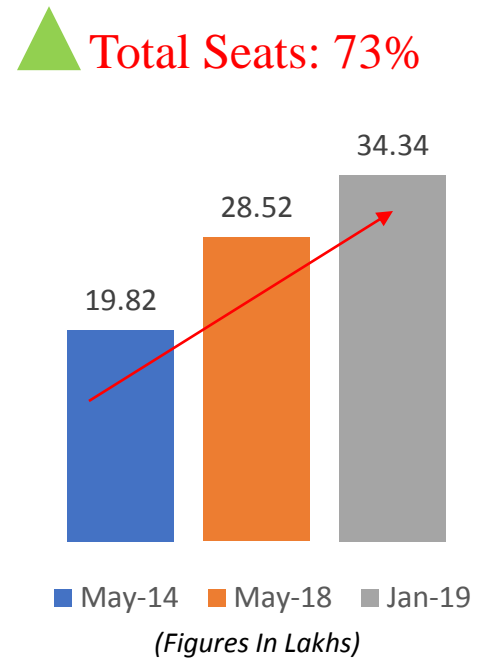
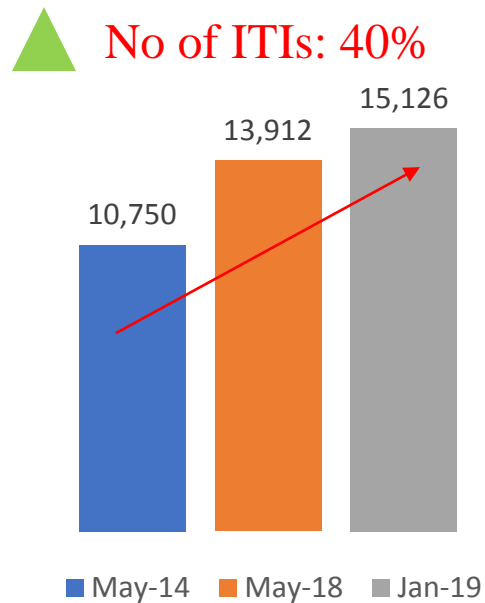
(B) Enhance quality and employability

- Voluntary Grading of ITI's & Autonomy of ITI's
- Employer connect enhancement
- Apprenticeship as essential component of Skill Development
- Statutory Regulation for Quality Assurance NCVET

(C) Make skills aspirational

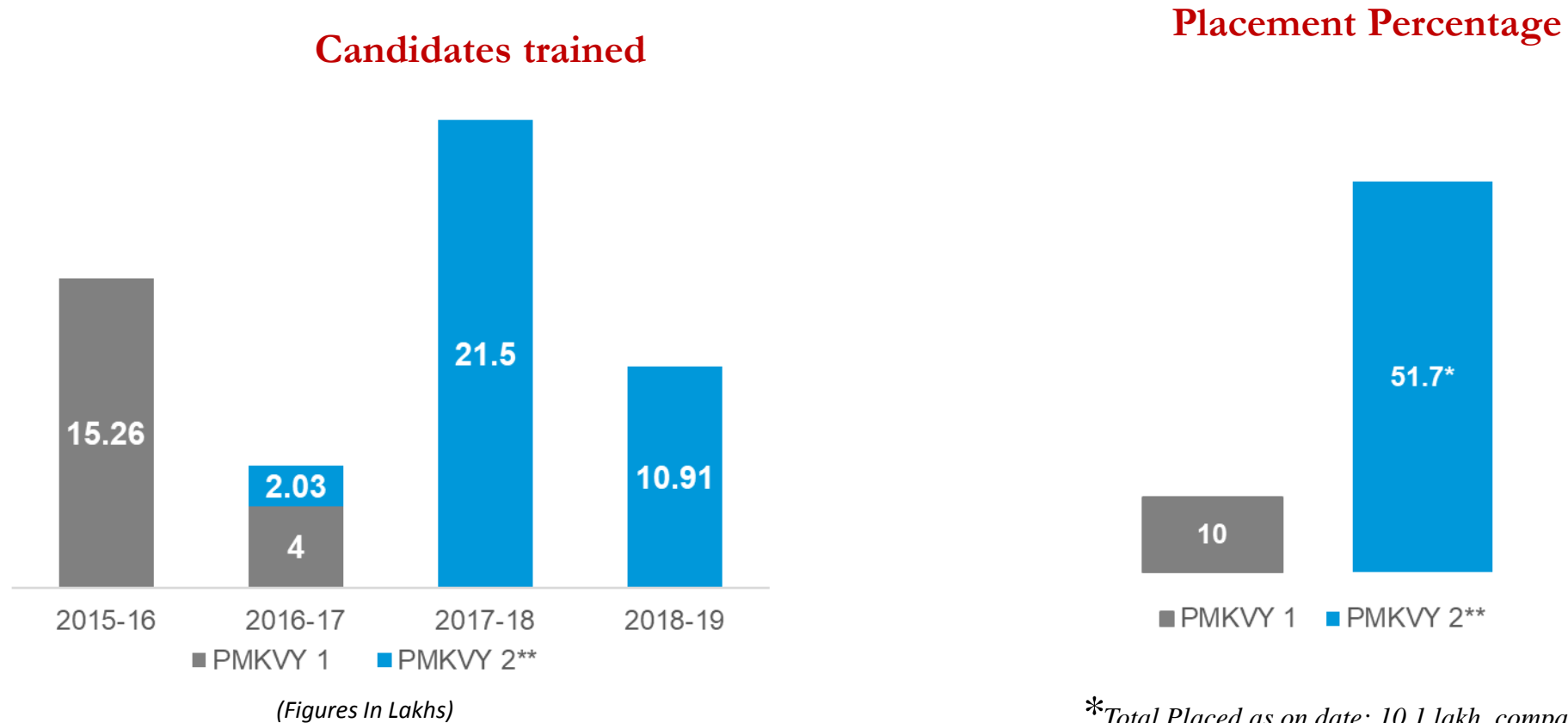
- Education Pathways
- LMIS
- Participation in Global Skills Market
- Skill Wage premium

(A) Increase Scale – ITI's



Significant increase in capacity and enrolment in ITI between May 2014- Jan 2019

(A) Increase Scale – Short Term Training



(Figures In Lakhs)

*Total Placed as on date: 10.1 lakh, compared with candidates certified 90 days ago i.e. 19.47 lakh

Mandatory placement tracking in PMKVY 2.0 lead to significant increase in placement percentage

(A) Domain Mismatch and Location

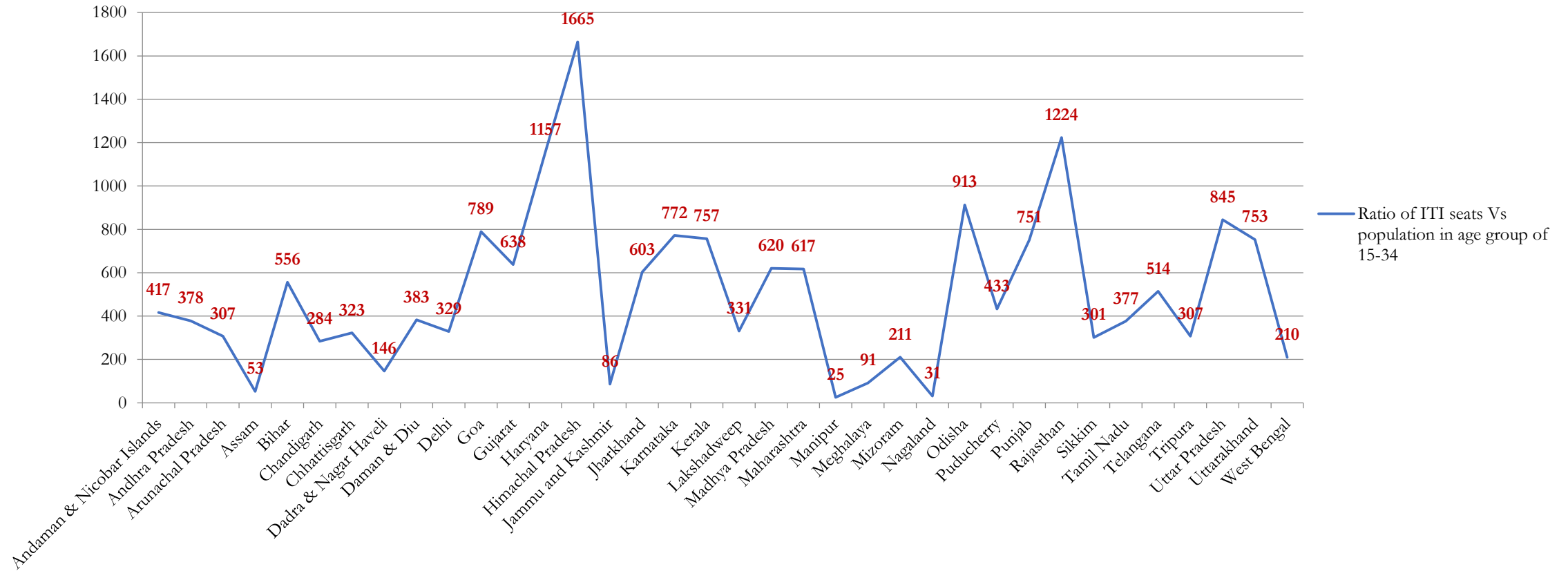
- A total of ~26.50 Lakhs ITI seats available under 138 “trades” (Engineering trades – 75, Non-engineering (Service) trades – 58 and Divyang trades - 5)
- 20 popular trades contribute to 90% of the total seats (nearly 24 Lakhs). The trades include just a few non-engineering trades (service trades)
- The popular trade list includes Electrician, Fitter, Computer Operator and Programming Assistant, Welder, Electronics Mechanic, Mechanic Diesel, Mechanic (Motor Vehicle), Wireman, Draughtsman (Civil), Mechanic (Refrigeration and Air-Conditioning), Turner, Health Sanitary Inspector, Plumber, Machinist, Sewing Technology, Stenographer & Secretarial Assistant (Hindi), Draughtsman (Mechanical), Basic Cosmetology, Information Communication Technology System Maintenance, Dress Making

(A) Domain Mismatch and Location

- There are 58 non-engineering (service) trades
- The most prominent of the non-engineering (service) trades are Computer Operator and Programming Assistant, Health Sanitary Inspector, Sewing Technology, Stenographer & Secretarial Assistant (Hindi), Basic Cosmetology, Dress Making, Fashion Design & Technology, Stenographer & Secretarial Assistant (English)
- The above non-engineering trades contribute towards ~10% of the total seats under all trades

(A) Domain Mismatch and Location

No. of ITI seats / Population (age group of 15-34) in lakh



(B) Enhance Quality and Employability- Employer Connect

- Establishment of Institute Management Committees (IMCs) in 1,227 ITIs
 - German model of dual training with industry introduced on a pilot basis
 - 80 short term training courses linked to apprenticeship (pilot launched)
 - 37 corporates contributed over Rs. 100 Cr in CSR to NSDF (2016-17)
 - 38 sector wise SSCs created which create important linkage between employer demands and skills supplied
-

Course standardization

- **1,911 QPs** and **5,000+** NOS developed and validated by 2000+ companies
- All central government scheme NSQF aligned
- SSDMs and States adopting NSQF
- 11 state core committees for NSQF alignment

Course modernization

- **63 course curricula upgraded** with industry consultations
- **35 new trades introduced** such as Renewables, Mechatronics, Instrumentation

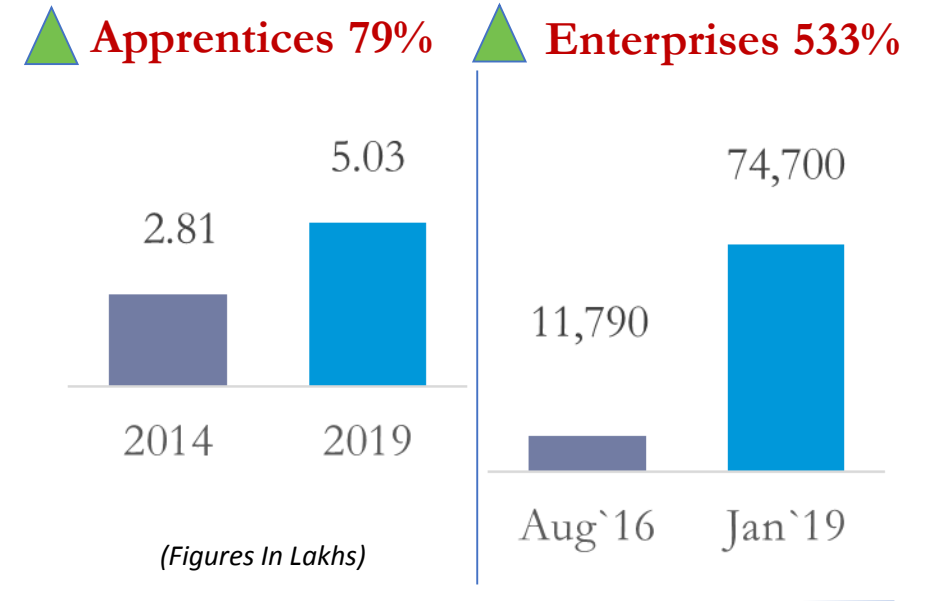
(B) Enhance Quality & Employability – Apprenticeships

Comprehensive reforms of Apprenticeship Act, 1961

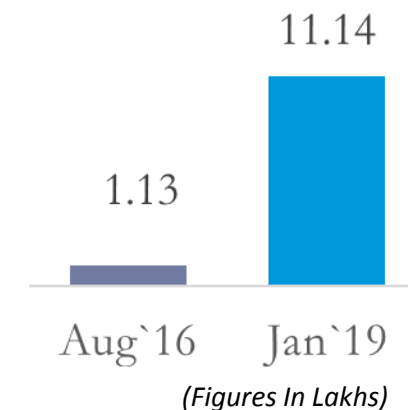
- Upper limit for apprenticeship increased to 10%
- Introduction of Optional trade pathway
- Scope of apprenticeship extended to service sector
- Penalties for employers rationalized
- TPA & self regulation by employer bodies

National Apprenticeship Promotion Scheme (NAPS) launched for catalyzing apprenticeship

- Incentivizing employers to onboard apprentices: 25% Government funding
- Online and transparent system of operations
- Integration with other skill development programs
- Better communication and outreach Strategy



▲ Candidates enrolled in Apprenticeship Portal : 885.8%



(B) Enhance quality & employability- Affiliation & Accreditation

New affiliation, accreditation norms and process for ITIs implemented w.e.f August 2018

- DGT formulated and introduced new affiliation norms for all existing and new ITIs.
- Intent to curb mushrooming substandard institutes across India to improve overall quality.
- Civil/Infra norms also revised for better standards

New Affiliation Procedure:

STAGE I

Desktop Assessment- Online assessment and NOC from State Government

STAGE II

Verification of Civil Infrastructure through State Government

STAGE III

Expert Committee verification or final inspection through active participation of State Government

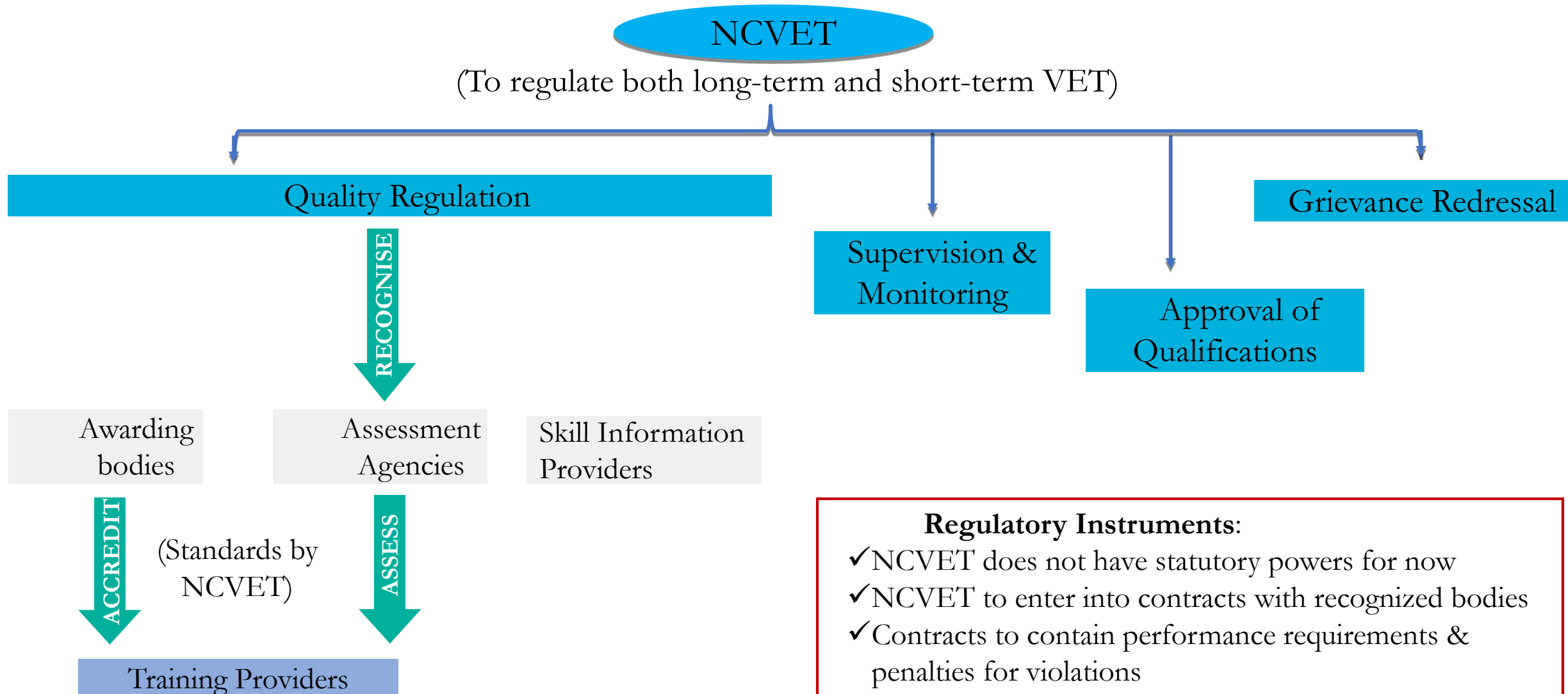
(B) Enhance quality & employability - Grading

Voluntary Grading of ITIs

- First phase of grading process started in November 2017 and the process completed in June 2018
- In Total 4811 ITIs including 2940 Pvt. it is have been graded and final grades were published on DGT/NCVT MIS website in June 2018.
- Twenty top graded ITIs were honored by Hon`ble Minister at New Delhi
- The second phase of grading process launched in January 2019 with the aim of grading all the remaining ITIs in the country.

Autonomy of ITIs- Autonomy linked with national grading

(B) Enhance quality & employability- Regulation for Quality Assurance



(C) Skills as Aspirational- Skill Wage Premium

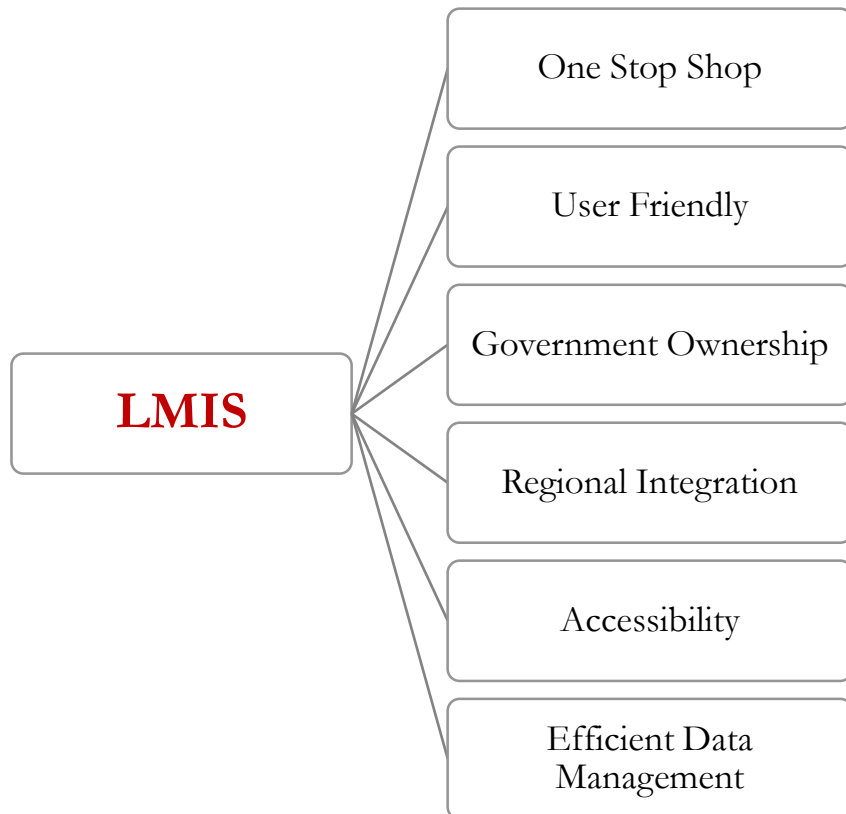
Three economists won the Nobel Prize for economics in 2001 for their work on information flows and market development.

- George Akerlof wrote “**The Market for Lemons**” in QJE 1970 identifying severe problems that afflict markets characterized by “asymmetric information”
- Michael Spence wrote “**Job Market Signaling**” in QJE 1973 showing how productive workers “signal” their productivity by getting formal education
- Joseph E. Stiglitz wrote “**The Theory of Screening, Education, and the Distribution of Income**” in the Yale Economics Journal, showing how economic agents use “screening” as a technique to extract information from another agent

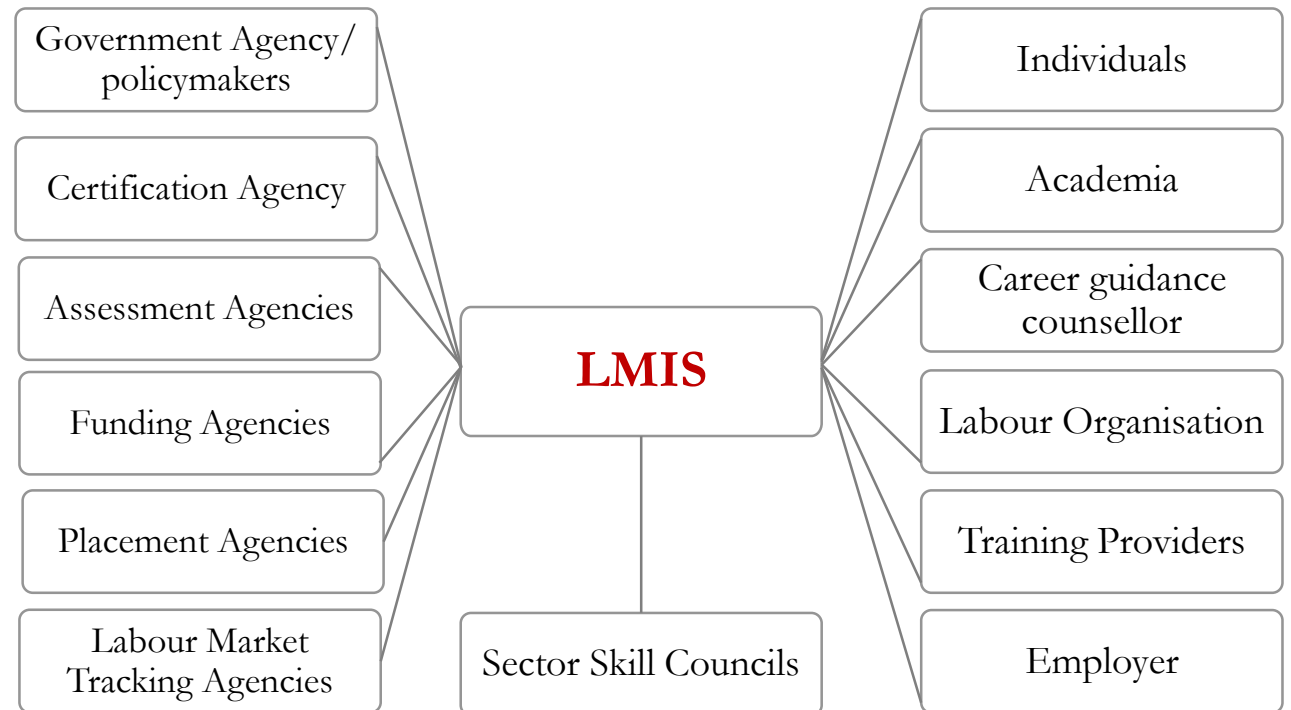
(C) Skills as Aspirational- LMIS

A Labour Market Information System (**LMIS**) is a labour market policy instrument to improve information flow in labour market. **LMI** refers to all data, quantitative and qualitative which can describe the labour market.

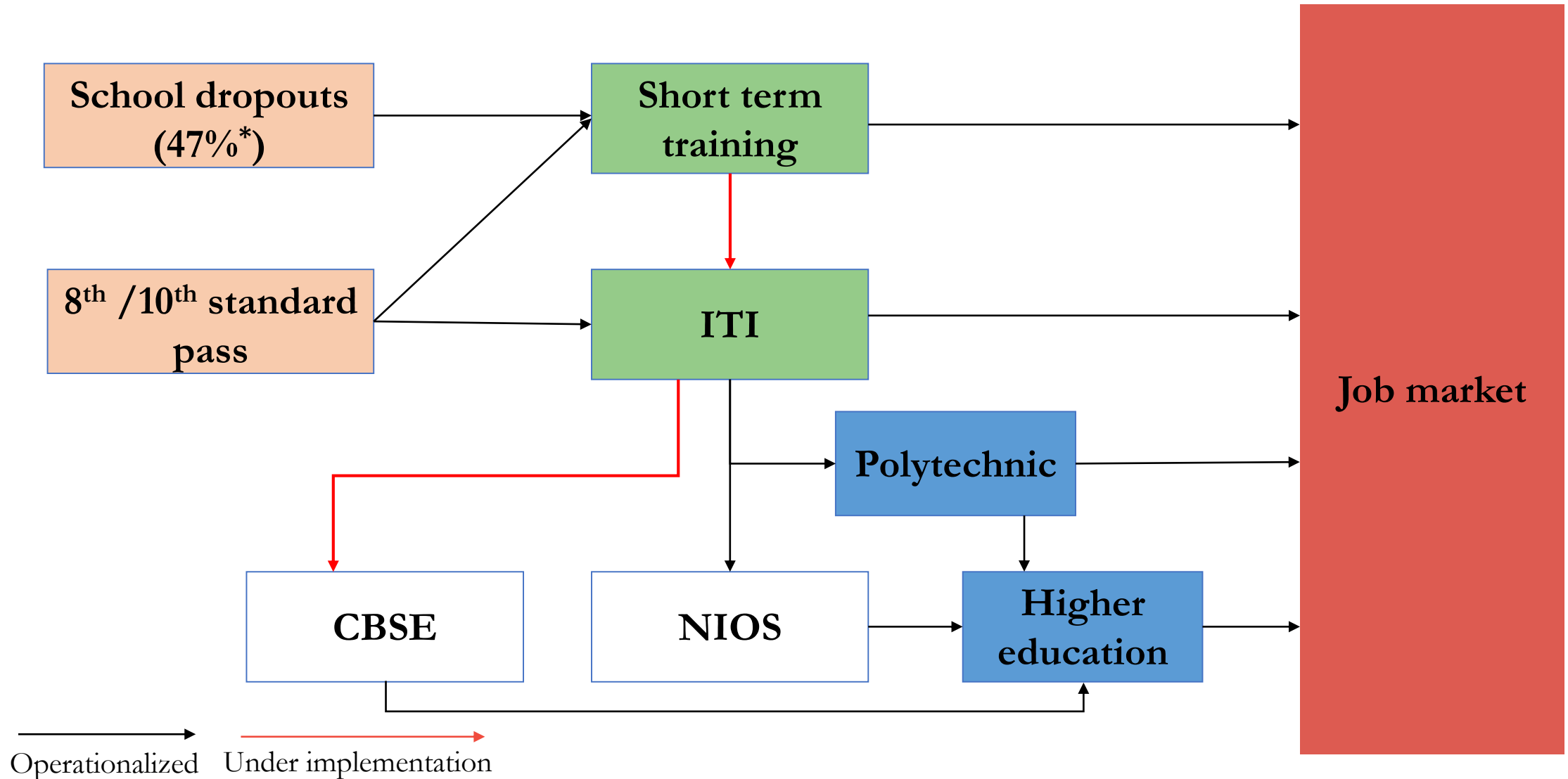
LMIS Characteristics



LMIS Key Stakeholders



(C) Skills as Aspirational : Education Pathways



47 %* drop out by higher secondary level

(C) Skills as Aspirational : Participation in Global Skills Market

Unlocking the Demographic Dividend: By 2022 countries like USA, UK and **China will fall short of skilled labour by 1 Mn, 2Mn, and 10 Mn** respectively while India will have **surplus of ~ 47 Mn** in the age group of 19-59 Years

Government`s Initiatives for International Skilling:

International Benchmarking	Global mobility G2G/B2B	Training Infrastructure	Research and other
<ul style="list-style-type: none"> • UAE: 15 Indian QPs mapped to 13 UAE Qualifications • UK: 82 QPs mapped to UK standards • Australia: 25 QPs mapped across 2 sectors 	<ul style="list-style-type: none"> • TITP Japan: 17 Candidates placed • IISC Pilot: 63 candidates placed • Sweden: B2B signed to send Skilled India IT & Telecom Professionals • UAE: Blue Collar, DTIs 	<ul style="list-style-type: none"> • Singapore Enterprise • Japan: JIMS • Germany: Dual TVET • France: Fondation De France, Schneider Electric • IISC+PDOT 	<ul style="list-style-type: none"> • Global Skill Gap Study • PIOCCI • USISPF

Challenges:

<ul style="list-style-type: none"> • Work Visa Challenges • Govt. imposed restrictions on immigration • Social Security 	<ul style="list-style-type: none"> • High Costs of Living in some countries • Acceptance of skill certification • Pre departure and post arrival support and training
--	--

Thank You

kprishnan@nic.in